

Claims:

1. A solid composition for use in cooking, flavoring food or preparing a final cooking water composition comprising water soluble food grade salts comprising at least two salts containing cations selected from the group consisting of calcium, magnesium, zinc and copper, wherein said cations, when included, are included in said solid composition in an amount effective to produce, after mixing with water to produce a final cooking water composition, a concentration of calcium cation ranging from about 5 mg/L to about 200 mg/L of said final composition; a concentration of magnesium cation ranging from about 5 mg/L to about 100 mg/L; a concentration of zinc cation ranging from about 0.05 to about 0.50 mg/L of said final composition; and a concentration of copper cation ranging from about 0.01 mg/L to about 0.30 mg/L, with the proviso that when only two salts are used in said solid composition, said salts comprise calcium cations and magnesium cations.

2. The solid composition according to claim 1 wherein said calcium cation is included in said composition in an amount effective, to produce, after mixing with water, a final cooking water composition comprising a concentration of calcium cation ranging from about 50 to about 85 mg/L.

3. The solid composition according to claim 1 wherein said magnesium cation is included in said composition in an amount effective to produce, after mixing with water, a final cooking water composition comprising a concentration of magnesium cation ranging from about 10 to about 35 mg/L.

4. The solid composition according to claim 1 wherein said zinc cation is included in said composition in an amount effective to produce, after mixing with water, a final cooking water composition comprising a concentration of zinc cation ranging from about 0.10 to about 0.25 mg/L.

5. The solid composition according to claim 1 wherein said copper cation is included

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7. The composition according to claim 6 wherein said additional cation is selected from the group consisting of iron, manganese or barium in an effective amount to produce in said final cooking water composition a concentration of said additional cation of less than about 0.2 mg/L.

8. The solid composition according to claim 1 wherein said cations are included in said composition in an amount effective to produce, after mixing with water to produce a final cooking water composition, a concentration in said water composition of calcium cation ranging from about 50 to about 85 mg/L, a concentration of magnesium cation ranging from about 10 to about 35 mg/L, a concentration of zinc cation ranging from about 0.10 to about 0.25 mg/L and a concentration of copper cation ranging from about 0.05 to about 0.20 mg/L.

9. A concentrated aqueous salt-containing composition for use in cooking, flavoring food or preparing a final cooking water composition, said concentrated composition comprising water and water soluble food grade salts, said water soluble salts comprising at least two salts containing cations selected from the group consisting of calcium, magnesium, zinc and copper, wherein said cations, when included, are included in said solid composition in an amount effective to produce, after mixing with additional water to produce a final cooking water composition, a concentration of calcium cation ranging from about 5 mg/L to about 200 mg/L of said final composition; a concentration of magnesium cation ranging from about 5 mg/L to about 100 mg/L of said final composition; a concentration of zinc cation

ranging from about 0.05 mg/L to about 0.5 mg/L of said final composition mg/L to about 200 mg/L of said final composition; and a concentration of copper cation ranging from about 0.01 mg/L to about 0.30 mg/L, with the proviso that when only two salts are used in said solid composition, said salts comprise calcium cations and magnesium cations.

10. The concentrated aqueous salt-containing composition according to claim 9 wherein said calcium cation is included in said composition in an amount effective, to produce, after mixing with said additional water, a final cooking water composition comprising a concentration of calcium cation ranging from about 50 to about 85 mg/L.

11. The concentrated aqueous salt-containing composition according to claim 9 wherein said magnesium cation is included in said composition in an amount effective to produce, after mixing with said additional water, a final cooking water composition comprising a concentration of magnesium cation ranging from about 10 to about 35 mg/L.

12. The concentrated aqueous salt-containing composition according to claim 9 wherein said zinc cation is included in said composition in an amount effective to produce, after mixing with said additional water, a final cooking water composition comprising a concentration of zinc cation ranging from about 0.10 to about 0.25 mg/L.

13. The concentrated aqueous salt-containing composition according to claim 9 wherein said copper cation is included in said composition in an amount effective to produce, after mixing with said additional water, a final cooking water composition comprising a concentration of zinc ranging from about 0.05 to about 0.20 mg/L.

14. The concentrated aqueous salt-containing composition according to claim 9 further comprising an effective amount of at least one additional cation selected from the group consisting of sodium, potassium, iron, manganese, barium, chromium, boron, cobalt, molybdenum, nickel, vanadium, tin and mixtures thereof, and optionally, a heat resistant nutritional supplement.

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15. The concentrated aqueous salt-containing composition according to claim 14 wherein said additional cation is selected from the group consisting of iron, manganese or barium in an effective amount to produce in said final cooking water composition a concentration of said additional cation of less than about 0.2 mg/L.

16. The concentrated aqueous salt-containing composition according to claim 9 wherein said cations are included in said composition in an amount effective to produce, after mixing with additional water to produce a final cooking water composition, a concentration in said water composition of calcium cation ranging from about 50 to about 85 mg/L, a concentration of magnesium cation ranging from about 10 to about 35 mg/L, a concentration of zinc cation ranging from about 0.10 to about 0.25 mg/L and a concentration of copper cation ranging from about 0.05 to about 0.20 mg/L.

17. The concentrated aqueous salt-containing composition according to claim 9 wherein said additional water and said composition are mixed at a volume ratio of about 1:1 to about 25:1.

18. The concentrated aqueous salt-containing composition according to claim 9 wherein said additional water and said composition are mixed at a volume ratio of about 5:1 to about 15:1.

19. The concentrated aqueous salt-containing composition according to claim 16 wherein said additional water and said composition are mixed at a volume ratio of about 1:1 to about 25:1.

20. The concentrated aqueous salt-containing composition according to claim 16 wherein said additional water and said composition are mixed at a volume ratio of about 5:1 to about 15:1.

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21. A packaged aqueous salt-containing composition for use in cooking or in flavoring food comprising water and water soluble food grade salts, said water soluble salts comprising at least two salts containing cations selected from the group consisting of calcium, magnesium, zinc and copper, wherein said calcium cation, when included, comprises a concentration ranging from about 5 mg/L to about 200 mg/L of said final composition; said magnesium cation, when included, comprises a concentration ranging from about 5 mg/L to about 100 mg/L; said zinc cation, when included, comprises a concentration ranging from about 0.05 to about 0.50 mg/L; and said copper cation, when included, comprises a concentration ranging from about 0.01 mg/L to about 0.30 mg/L, with the proviso that when only two salts are used in said composition, said salts comprise calcium cations and magnesium cations; said composition being packaged in a container.

22. The aqueous composition according to claim 21 wherein said calcium cation is included in said composition in an amount ranging from about 50 to about 85 mg/L.

23. The aqueous composition according to claim 21 wherein said magnesium cation is included in said composition in an amount ranging from about 10 to about 35 mg/L.

24. The aqueous composition according to claim 21 wherein said zinc cation is included in said composition in an amount ranging from about 0.10 to about 0.25 mg/L.

25. The aqueous composition according to claim 21 wherein said copper cation is included in said composition in an amount ranging from about 0.05 to about 0.20 mg/L.

26. The aqueous composition according to claim 21 further comprising an effective amount of at least one additional cation selected from the group consisting of sodium, potassium, iron, manganese, barium, chromium, boron, cobalt, molybdenum, nickel, vanadium, tin, mixtures thereof, and optionally, a heat resistant nutritional supplement.

27. The aqueous composition according to claim 26 wherein said additional cation is

selected from the group consisting of iron, manganese or barium in an amount less than about 0.2 mg/L.

28. The aqueous composition according to claim 21 wherein said calcium cation ranges from about 50 to about 85 mg/L, said magnesium cation ranges from about 10 to about 35 mg/L, said zinc cation ranges from about 0.10 to about 0.25 mg/L and said copper cation ranges from about 0.05 to about 0.20 mg/L.

29. A method of cooking food comprising:

- i. removing said composition according to claim 21 from said container;
- ii. heating said composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

30. A method of cooking food comprising:

- i. removing said composition according to claim 28 from said container;
- ii. heating said composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

31. A method of cooking food comprising:

- i. producing a cooking water composition by adding an effective amount of the composition according to claim 1 to a sufficient amount of water to produce said cooking water composition,
- ii. heating said cooking water composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

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32. A method of cooking food comprising:

- i. producing a cooking water composition by adding an effective amount of the composition according to claim 8 to a sufficient amount of water to produce said cooking water composition,
- ii. heating said cooking water composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

33. A method of cooking food comprising:

- i. producing a cooking water composition by adding an effective amount of the composition according to claim 9 to a sufficient amount of water to produce said cooking water composition,
- ii. heating said cooking water composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

34. A method of cooking food comprising:

- i. producing a cooking water composition by adding an effective amount of the composition according to claim 16 to a sufficient amount of water to produce said cooking water composition,
- ii. heating said cooking water composition to cooking temperature;
- iii. exposing food to the heated composition of step ii for a time sufficient to cook said food; and
- iv. removing said food from said heated composition.

35. A solid composition comprising food grade salts, said salts containing cations selected from at least two of the group consisting of calcium, magnesium, zinc and copper wherein the amount of calcium cation in said composition ranges from about 0.5% to about

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50% by weight; the amount of magnesium cation ranges from about 0.2% to about 15% by weight; the amount of zinc cation ranges from about 0.001% to about 0.20 % by weight; and the amount of copper cation ranges from about 0.001% to about 0.05% by weight, with the proviso that when only two salts are used in said composition, said salts comprise calcium cations and magnesium cations.

36. The composition according to claim 35 wherein said calcium cation comprises about 1% to about 20% by weight.

37. The composition according to claim 35 wherein said magnesium cation comprises about 0.5% to about 15% by weight.

38. The composition according to claim 35 wherein said zinc cation comprises about 0.01% to about 0.20% by weight.

39. The composition according to claim 35 wherein said copper cation comprises about 0.002% to about 0.05% by weight.

40. The composition according to claim 35 wherein said calcium cation comprises about 1% to about 20% by weight, said magnesium cation comprises about 0.5% to about 15% by weight, said zinc cation comprises about 0.01% to about 0.20% by weight and said d copper cation comprises about 0.002% to about 0.05% by weight.

41. The composition according to claim 35 comprising an effective amount of at least one additional cation selected from the group consisting of sodium, potassium, iron, manganese, barium, chromium, boron, cobalt, molybdenum, nickel, vanadium, tin and mixtures thereof, and optionally, a heat resistant nutritional supplement.

42. The composition according to claim 41 wherein said additional cation is selected from the group consisting of iron, manganese or barium. in an amount ranging from less than

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about 0.001% to about 0.01% by weight.

43. The composition according to claim 40 comprising an effective amount of at least one additional cation selected from the group consisting of sodium, potassium, iron, manganese, barium, chromium, boron, cobalt, molybdenum, nickel, vanadium, tin and mixtures thereof, and optionally, a heat resistant nutritional supplement.

44. The composition according to claim 43 wherein said additional cation is selected from the group consisting of iron, manganese or barium. in an amount ranging from less than about 0.001% to about 0.01% by weight.

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